

REPORT OF THE SPECIAL COMMITTEE ON HIGHWAYS

1922

The undersigned, appointed a special committee at the March meeting 1922 to consider the conditions relating to the Marlboro road and Framingham road and Newton Street and report at the adjourned meeting April 5th with their recommendations, respectfully submit the following report:

Your committee has consulted with the State Commissioner of Highways and with the County Commissioners, and has carefully examined the three roads mentioned in company with an engineer supplied by the State Highway Commission and with the Highway Commissioner of the Town of Hudson.

That part of the Framingham road from the junction with the State Highway to Stone's Corner contains good material and can be repaired without undue expense. At the eastern end of the road, between the end of the causeway and the State Highway leading to Framingham, there is a distance of about 400 feet which needs to be properly drained and underlaid with a heavy stone base in order to ensure dry and proper surface. It is estimated that this can be done at a cost of about \$1000. A careful examination of this road across the causeway with engineers leads the committee to recommend that this road be repaired as far as the railroad crossing in Southboro by tearing up with the steam-roller, carefully grading and rolling and oiling. This treatment will ensure a good road for the coming season at a cost of approximately \$1500. For the purpose of doing this work a road-roller with the proper appliances for tearing up the road and laying it down again can be hired at a cost of about \$20. a day, including a man to work it. That portion of Framingham Road

from the Marlboro Road to Stone's Corner is principally used by travel outside the town. If this road is to be rebuilt we believe it should be done by the State. In any event many other pieces of road in the town are of greater importance and should receive earlier attention.

We recommend that this portion of Framingham Road be left to the Highway Surveyor to repair in the ordinary way out of his appropriation. The cost of a new road-roller would be \$6300., which in the judgment of your committee is an entirely unjustifiable outlay. Road-rollers from towns in the vicinity can be hired from time to time as occasion requires, or in some instances borrowed from the State Highway Commission, and your committee believes it far wiser not to invest so large a sum in a permanent piece of machinery which would be used but a small portion of the year.

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We think it advisable that this piece of work be done under the direction of the Highway Surveyor, advised by a competent engineer.

The length of the Marlboro road from the Marlboro city line to Main Street is just one mile and three-quarters. Three methods of repairing this road have been suggested: One, to tear it up with a road-roller and properly grade it and surface where absolutely necessary, roll and oil. Mr. Robert Burnett has offered to undertake this work for \$6500. a mile, if he can have exclusive control of the work; if the cost exceeds that amount, he offers to supply additional money himself; but your committee is inclined to advise against this method of repair as it will require frequent oiling and repair each year and in all probability will not supply a road which can stand up under the heavy traffic which passes over

this highway. Two methods of building stone roads have been suggested by the engineer of the State Highway Commission, the first costing about \$25,000. a mile and the second about \$35,000. a mile. The first method provides for digging out the surface of the road for a width of 18 feet and putting in a stone foundation of 8 inches covered by 2 inches of crushed stone and tar, all to be firmly compacted and rolled. This would give the same quality of road as that which has already been built by Marlboro down to the line between Marlboro and Southboro, which road appears now to be in good condition and carries the traffic well. The committee cannot definitely report that the State and the County will contribute each one-third to the cost of such a road, but they have taken the liberty of filing petitions with the County Commissioner and with the State Highway Commission to obtain the aid of those respective organizations. These petitions can be abandoned or withdrawn if the Town does not approve. The third method which is suggested above would cost \$35,000. a mile, is an 18-foot road with 8 inches of stone foundation and 4 inches of crushed stone and tar. We do not feel justified in recommending construction on so expensive a basis, but we do recommend the second method suggested above - that is, 8 inches of heavy stone covered with 2 inches of crushed stone and tar, with the State contributing one-third of the cost and the County one-third, which would make the cost to the Town in the neighborhood of \$15,000. And we should recommend the issuance of notes payable in not more than five years. Such road should be built by contract under the supervision of the State Highway Commissioner, who will supply the engineers except

for the preliminary work of measurement and putting in the grade stakes.

After careful examination of the stone crusher and consultation with engineers, we do not recommend the use of the stone crusher or use of local stone in the building of this highway except that local stone broken in large pieces may be used for the 8 inch base. We are advised by the engineers that the local stone is of varying degrees of hardness and that its use as crushed stone would result in hard and soft spots and therefore inequalities in the road. We have also considered carefully the question of purchase of power for the stone crusher. We regard a gas engine as inadvisable, as experience has shown it gives unsatisfactory work. A steam plant would be too expensive. Satisfactory results have been obtained with an electric motor, which can be purchased for about \$600. But in our judgment the use of the stone crusher would not be either economical or satisfactory to the Town. The plan of putting the crusher in a gravel pit and running through stone and gravel is impracticable and unsatisfactory. The product delivered is uneven, consisting partly of gravel, of sand and of crushed stone, and its use for road material is quite useless. It also involves danger of accidents and considerable cost for repairs. The output of the crusher is estimated at about 80 tons a day if run to capacity. The amount of crushed stone needed for the Marlboro road is 7000 tons, which means a season's work for the crusher, and we are advised when this is done a sum of money equal approximately to the first cost of the crusher would have to be expended on it in repairs. Such high-priced machinery as this is economical only when

it is used by people with thorough experience in its use and used constantly so that it is not left idle. We believe it would be more economical to negotiate a sale of the stone-crusher at the best price possible and if the Town needs crushed stone to buy it. It can be bought, delivered on any road in town, at \$3. or less per ton, which is in our judgment and that of the State Engineer less than it would cost the Town to crush it.

As to Newton St. except for the portion from the blacksmith shop to the dairy this road is not now a much used thoroughfare. We recommend ordinary repairs by the Highway Surveyor and further study by the permanent Committee, We recommend below, before large expense be incurred on this road:

HIGHWAY POLICIES.

The committee believes it would be advisable to continue to make a careful study of the various roads in town with a view toward the establishment of a definite well thought out highway policy to the end that a certain amount of well constructed highway be provided for each year. In the long run it will mean better streets and lower costs of maintainance. A permanent highway committee with authority to study, investigate and make recommendations should be appointed.